IN THE CLAIMS

1. (Currently Amended) In a communication system, a method of communicating data comprising:

accepting data from a source of user data;

accumulating the data until a Huffman codeword is recognized;

mapping the Huffman codeword into a channel symbol, the mapping generating a distribution that is approximately characterized by a sampled Gaussian distribution; and

applying the channel symbol to an input of a channel at a constant rate.

2. (Original) The method of claim 1 further comprising scrambling the user data into pseudo-random data.

3. (Original) The method of claim 1 further comprising performing additional channel coding operations to achieve coding gain in addition to shaping gain.

4. (Original) The method of claim 1 further comprising performing a framing operation on the data.

5. (Original) The method of claim 1 further comprising modulating channel symbols in various ways.

6. (Original) The method of claim 1 further comprising receiving symbols from an

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output of the channel.

7. (Original) The method of claim 2 further comprising:

receiving symbols from an output of the channel; and

descrambling the received pseudo-random data into user data.

8. (Original) The method of claim 3 further comprising receiving symbols from an output of the channel by performing additional channel decoding operations.

9. (Original) The method of claim 4 further comprising:

receiving symbols from an output of the channel; and

performing a deframing operation.

10. (Original) The method of claim 5 further comprising receiving symbols from an output of the channel by performing demodulation operations.

11. (Original) The method of claim 6 further comprising performing a Huffman encoding operation on received channel symbols.

12. (Original) The method of claim 11 further comprising communicating the received data to a sink of user data.

13. (Original) The method of claim 1 wherein a symbol constellation with unequal

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symbol probabilities leads to a shaping gain of greater than 1 dB.

14. (Original) The method of claim 13 whereby a shaping gain of approximately 1.35 dB is attained.

15. (Original) The method of claim 13 whereby a shaping gain of approximately 1.5 dB is attained.

16. (Currently Amended) A communication system comprising:

a communication node having a shaper, the shaper generating channel symbols in a constellation that exhibits a shaping gain of greater than 1 dB,

wherein the shaper comprising a Huffman decoder that maps channel symbols into a distribution that is approximately a sampled Gaussian distribution, and

wherein the communication node transmits channel symbols at a constant rate.

17. (Original) The system of claim 16 whereby a shaping gain of approximately 1.35 dB is attained.

18. (Original) The system of claim 16 whereby a shaping gain of approximately 1.5 dB is attained.

19. (Original) The system of claim 16 wherein the communication node further comprises a transmitter, and wherein the transmitter comprises the shaper.

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20. (Currently Amended) A communication system comprising a communication node that performs a Huffman decoding operation to generate channel symbols that are characterized approximately by a sampled Gaussian distribution, the communication node transmitting the channel symbols at a constant rate.

21. (Currently Amended) The system of claim 20 wherein the Huffman decoding operation results in a constellation of symbols and associated symbol propabilities probabilities leading to a shaping gain greater than 1 dB.

22. (Original) The system of claim 21 whereby a shaping gain of approximately 1.35 dB is attained.

23. (Original) The system of claim 21 whereby a shaping gain of approximately 1.5 dB is attained.

24. (Original) The system of claim 20 wherein the communication node has a transmitter, and wherein the Huffman decoding operation is performed by the transmitter.

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